

70



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,984	08/30/2000	Martin Joseph Kaplan	1156a	1263

28004 7590 04/16/2004  
SPRINT  
6391 SPRINT PARKWAY  
KSOPHT0101-Z2100  
OVERLAND PARK, KS 66251-2100

EXAMINER

WONG, BLANCHE

ART UNIT PAPER NUMBER

2667

DATE MAILED: 04/16/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/650,984

Applicant(s)

KAPLAN ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on January 15, 2004.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-26 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5)  Notice of Informal Patent Application (PTO-152)
- 6)  Other: \_\_\_\_\_

### DETAILED ACTION

1. Examiner acknowledges the new abstract in response to the Office Action mailed December 18, 2003, and thanks the Applicants for clarifying the differences between the scopes of the previous patent (U.S. Pat No. 6,141,339) and this application in the new abstract. Examiner further suggests a title change to reflect the specificity of the telecommunications system clarified in the new abstract.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1,7-9,11-12,14,20-22,24-25** are rejected under 35 U.S.C. 102(e) as being clear anticipated by Naboulsi et al. (U.S. Pat No. 5,805,591).

With regard to claims 1 and 14, Naboulsi discloses a user communication hub 26 (subscriber network interface) for providing communication services to an end user (multiple end users can be seen in Fig. 1) at a user location 24 (subscriber premise location), wherein the user communication hub 26 (subscriber network interface) comprises: a plurality of communication interfaces 62,64,66,68 (respective subscriber

service modules) that are operational to communicate with a plurality of end-user communication devices 72,74,76,78,80 (explained in col. 6, ln. 31-63) that are located at the user location 24 (subscriber premise location) and that use a plurality of communications formats col. 6, ln. 54-59 (processing incoming and outgoing ATM cells in conformance with various standards), wherein the communication interfaces 62,64,66,68 (respective subscriber service modules) are operational to convert col. 6, ln. 54-59 (processing incoming and outgoing ATM cells in conformance with various standards) between the communications formats and an ATM format, wherein at least one of the communication interfaces 62,64,66,68 (respective subscriber service modules) comprises an analog telephony interface 87,89 (POTS telephone line cards) that is operational to convert col. 6, ln. 54-59 (processing incoming and outgoing ATM cells in conformance with various standards) between the analog telephony format and the ATM format; a DSL interface 68 (telephone interface is within the subscriber network interface 26 that is connected to an external system by respective drop cable 25) that is coupled to the communications interfaces 62,64,66,68 (respective subscriber service modules) and a communication system Figs. 1,2 and that is operational to communicate col. 6, ln. 54-59 (processing incoming and outgoing ATM cells in conformance with various standards) with the communications system using an ATM over DSL format.

With regard to claims 7-9 and 20-22, Naboulsi discloses one of the communication interfaces 62,64,66,68 (respective subscriber service modules) that comprises a computer interface 64 (PC LAN connection) operational to convert between

a computer format and the ATM format and an Ethernet interface 74 (see also col. 6, ln. 35-36, Ethernet connection), and that is operational to route a communication request from a computer to a service node in the communication system Figs. 1,2.

With regard to claims 11-12 and 24-25, Naboulsi discloses one of the communication interfaces 62,64,66,68 (respective subscriber service modules) that comprises an ATM interface operational to exchange ATM signaling col. 6, ln. 54-59 (processing incoming and outgoing ATM cells in conformance with various standards) between the end-user communication devices 72,74,76,78,80 (explained in col. 6, ln. 31-63) and the communication system Fig. 1, and a MPEG interface 62 that is operational to provide video signal col. 6, ln. 32-33 (video transmission) to the end-user communication device 72 (see also col. 6, ln. 34-35) from the ATM format.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 2-13 and 15-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Naboulsi and Focsaneanu et al. (U.S. Pat No. 5,610,910).

With regard to claims 2-13 and 15-26, Naboulsi discloses the user communication hub of claim 1 and the method of claim 14.

With regard to claims 2-4 and 15-17, Naboulsi fails to show in the user communication hub and method, an analog telephony interface that is operational to detect on-hook and off-hook conditions, as recited in claims 2 and 15; and to detect dual tone multi-frequency tones, as recited in claims 3 and 16; and to provide echo cancellation, as recited in claims 4 and 17. In an analogous art, Focsaneanu discloses in Fig. 15-17 wherein the analog telephony interface is operational to provide dial tone (see col. 10, ln. 10-15) and power to the telephone and detect on-hook and off-hook conditions (see col. 1, ln. 46-50.), and detect DTMF tones (see col. 10, ln. 10-15). At time of the invention, it would have been obvious to a person of ordinary skill in the art to modify an analog telephony interface such as that in Naboulsi to include detection for on-hook and off-hook conditions, detection for dual tone multi-frequency tones, and echo cancellation, such as those features taught in Focsaneanu, in order to provide better utilization of CPE. Focsaneanu, col. 4, ln. 11-12.

With regard to claims 5 and 18, Naboulsi fails to show in the user communication hub and method, an analog telephony interface that is operational to provide echo cancellation, as recited in claims 5 and 18. Providing echo cancellation is a desirable quality of service (QoS) and is inherent in many communication systems today. (See also Focsaneanu, col. 10, ln. 20-25 and col. 11, ln. 7-16)

With regard to claims 6 and 19, Naboulsi fails to show in the user communication hub and method, an analog telephony interface that is operational to forward control information to a service node in the communication system, as recited in claims 6 and 19. In an analogous art, Focsaneanu also discloses in Fig. 7-15 wherein the analog

telephony interface is operational to forward control information to a service node 200 (service provider) in the communication system.

With regard to claims 7-9 and 20-22, Focsaneanu also discloses a computer interface 232 (modem) operational to convert between a computer format and the ATM format Fig. 8, 12-15 (Data Network) (See also col. 7, 15-50, "The data switched networks may include, among other networks, . . . an ATM network . . ."), wherein the computer interface comprises an ethernet internet (See also col. 7, 15-50, "The data switched networks may include, among other networks, . . . TCP/IP . . .") and operational to route a communication request col. 7, ln. 39 from a computer to a service node 200 (service provider) in the communication system.

Regarding claims 10-13 and 23-26, a Java interface, an ATM interface, a MPEG interface, and an utility interface are outstanding interfaces in any communication system today. Java is an object-oriented programming language and the characteristic of Java makes it a useful language for programming Web application, according to Microsoft Computer Dictionary, 5<sup>th</sup> Ed. It is inherent that nowadays, web server such as the one 604 in Fig. 6 of Focsaneanu, will include a Java interface. Moreover, video and net conferencing are inevitable over the Internet given the current state of globalization, so the capability to handle video signals and a MPEG interface are not foreign, and as a matter of fact, very doable. It is only natural to include an utility interface in an accounting element in the performance manager 603 to collect and forward metering information. The push for broadband, including an ATM interface, is just a consequence of all these information processing.

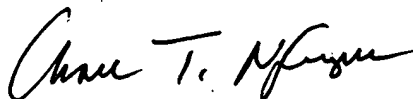
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 703-305-8963. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*BW*

BW  
March 25, 2004



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600